REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested.

I. STATUS OF THE CLAIMS

None of the claims are amended herein.

In view of the above, it is respectfully submitted that claims 1-49 are currently pending and under consideration in the present application.

II. REJECTION OF CLAIMS 1-49 UNDER 35 U.S.C. § 103(A) AS BEING UNPATENTABLE OVER YOSHIMURA (USP# 5,793,917) IN VIEW OF SUZUKI ET AL. (USP# 5,629,795)

In item 1, on page 2 of the Office Action, the Examiner asserts that Yoshimura discloses that an optical signal undergoes both positive and negative dispersion traveling the length of the fiber and based on the wavelength of the optical signal in column 2, lines 12-30.

However, the Examiner only addresses the teachings of Yoshimura in his response to our previous arguments, but fails to explain how Yoshimura and Suzuki combine to disclose the features of the present invention. Nevertheless, although Yoshimura teaches that an optical signal undergoes both positive and negative dispersion while traveling the length of a fiber, Yoshimura fails to teach the claimed method for repairing a transmission line as recited, for example, in claim 1 of the present invention. More importantly, and as indicated by the Examiner in item 3, on page 3 of the Office Action, Yoshimura does not disclose the method of inserting a third fiber in a section comprising a first fiber having a positive dispersion with respect to wavelength transmitted through the section and a second fiber having a negative dispersion with respect to wavelength transmitted through the section, wherein the third fiber has an absolute value of dispersion per unit of length smaller than the absolute value of dispersion per unit of length of the first and the second fibers (see claim 1).

Thus, while the Examiner asserts that it is not considered patentable that the applicant merely replicates the DCF at points along the fiber to achieve zero-dispersion, the Examiner has not shown where the claimed features of the present invention are disclosed in the Yoshimura reference. Moreover, the Examiner's statement that the applicant merely replicates the DCF at points along the fiber to achieve zero-dispersion, is a broad conclusory statement that does not provide evidence that Yoshimura teaches the claimed invention.

As indicated in our previous response, Yoshimura does not teach or suggest that a section of the optical cable 103 between the intervals of the optical repeaters 105a-105n, includes a fiber having a positive dispersion with respect to wavelength transmitted through the section and a fiber having a negative dispersion with respect to wavelength transmitted through the section, like the transmission line recited in claim 1 of the present invention. Like the teachings of Yoshimura, Suzuki does not teach or suggest that a section of the optical fiber 2 between intervals of the optical repeaters 3 includes a fiber having a positive dispersion with respect to wavelength transmitted through the section and a fiber having a negative dispersion with respect to wavelength transmitted through the section like the transmission line recited in claim 1 of the present invention.

That is, Suzuki teaches, "the optical fiber 2 is about 9000km long, the average zero dispersion wavelength is 1555 nm, shorter than the wavelength of the light wave signal, and the average wavelength dispersion value at the signal wavelength is 0.2 ps/km/nm. To compensate for losses of the optical fibers, there are disposed 300 optical amplifying repeaters 3 at intervals of around 30 km" (emphasis added, see column 6, line 16-22).

Suzuki also teaches, "the dispersion media 4 are each formed by a 600-m long, dispersion compensating fiber (zero dispersion wavelength: 2400nm) which has a wavelength dispersion value of –50 ps/km/nm to cancel a positive accumulated wavelength dispersion of 36 ps/nm for a 180-km long portion of the optical fiber" (emphasis added, see column 6, line 42-48).

Apparently the average wavelength dispersion value at signal wavelength for the dispersion media 4 is bigger than that of the optical fiber 2. In the present invention, "the third fiber has an absolute value of dispersion per unit of length smaller than an absolute value of dispersion per unit of length of the first and second fibers" (emphasis added, see claim 1).

Therefore, Yoshimura and Suzuki, either alone or in combination, do not teach or suggest the method of repairing a transmission line in which a third fiber is inserted in a section of the transmission line that comprises a first fiber having a positive dispersion with respect to wavelength transmitted through the section and a second fiber having a negative dispersion with respect to wavelength transmitted through the section, wherein the third fiber has an absolute value of dispersion per unit of length smaller than the absolute value of dispersion per unit of length of the first and the second fibers (see claim 1).

Claims 11, 20, 29, 42, 46 and 47 relate to patentably distinguishing features similar to those recited in claim 1. Therefore, it is respectfully submitted that claims 11, 20, 29, 42, 46 and

47 patentably distinguish over the cited prior art for the same reasons as those regarding claim 1.

Claims 2-10, 12-19, 21-28, 30-41, 43-45 and 48-49 depend from claims 1, 11, 20, 29, 42 and 47, respectively. Thus, for at least the reason that claims 1, 11, 20, 29, 42 and 47 distinguish over the cited prior art, it is respectfully submitted that claims 2-10, 12-19, 21-28, 30-41, 43-45, 48 and 49 also distinguish over the cited prior art.

In view of the above, it is respectfully submitted that the rejection is overcome.

III. CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that each of the claims patentably distinguishes over the prior art, and therefore defines allowable subject matter. A prompt and favorable reconsideration of the rejection along with an indication of allowability of all pending claims are therefore respectfully requested.

If there are any additional fees associated with filing of this Response, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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